



13281 U.S. PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	2072.0010008/LBB/SJE
First Inventor	Michelle H. Hanna
Title	Abortive Promoter Cassettes (as amended)
Express Mail Label No.	

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

## ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 129]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 33]
5. Oath or Declaration [Total Sheets 2]
  - a. ☐ Newly executed (original or copy)
  - b. ☒ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
    - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☒ Paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Authorization under 37CFR 1.136(a)(3)  
The name of the assignee is: Ribomed Biotechnologies, Inc.

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: 09/984,664

Prior application information:

Examiner Kim, Young L.Art Unit: 1637For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number: 26111 OR ☐ Correspondence address belowName Sterne, Kessler, Goldstein & Fox P.L.L.C.

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type) Lawrence B. Bugaisky

Registration No. (Attorney/Agent)

35,086Signature Lawrence B. Bugaisky

Date

March 3 2004

This collection of information is required by 37 CFR 1.63(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

15535 U.S. PTO  
101790766

030304



13281 U.S. PTO

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

556.00

**Complete if Known**

Application Number	To be assigned
Filing Date	March 3, 2004
First Named Inventor	Michelle H. Hanna
Examiner Name	To be assigned
Art Unit	To be assigned
Attorney Docket No.	2072.0010008/LBB/SJE

**METHOD OF PAYMENT** (check all that apply)☐ Check ☒ Credit card ☐ Money Order ☒ Other\*\* ☐ None☐ \*Charge any deficiencies or credit any overpayments in Deposit Account: the fees to Deposit Acct. No. 19-0036.

Deposit Account Number 19-0036

Deposit Account Name Sterne Kessler, Goldstein &amp; Fox P.L.L.C.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments☐ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	385.00
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(\$)</b> 385.00

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
38	-20	**= 18 X 9.00	= 171.00
Independent Claims	2	-3	**= 0 X 0.00 = 0.00
Multiple Dependent			0 = 0.00

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2)** (\$)

171.00

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION** (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$)

0.00

**SUBMITTED BY**

(Complete (if applicable))

Name (Print/Type)	Lawrence B. Bugaisky	Registration No. (Attorney/Agent)	35,086	Telephone	(202) 371-2600
Signature	<i>Lawrence B. Bugaisky</i>	Date	March 3, 2004		

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Robert Greene Sterne  
Edward J. Kessler  
Jorge A. Goldstein  
David K.S. Cornwell  
Robert W. Esmond  
Tracy-Gene G. Durkin  
Michele A. Cimbala  
Michael B. Ray  
Robert E. Sokohl  
Eric K. Steffe  
Michael Q. Lee  
Steven R. Ludwig  
John M. Covert  
Linda E. Alcorn  
Robert C. Millonig  
Lawrence B. Bugaisky  
Donald J. Featherstone  
Michael V. Messinger

Judith U. Kim  
Timothy J. Shea, Jr.  
Patrick E. Garrett  
Heidi L. Kraus  
Edward W. Yee  
Albert L. Ferro  
Donald R. Banowitz  
Peter A. Jackman  
Teresa U. Medler  
Jeffrey S. Weaver  
Kendrick P. Patterson  
Vincent L. Capuano  
Eldora Ellison Floyd  
Thomas C. Fiala  
Brian J. Del Buono  
Virgil Lee Beaton  
Kimberly N. Reddick  
Theodore A. Wood

Elizabeth J. Haanes  
Joseph S. Ostroff  
Frank R. Cottingham  
Christine M. Uhulier  
Rae Lynn Prengaman  
Jane Shershenovich  
Lawrence J. Carroll  
George S. Bardmesser  
Daniel A. Klein  
Jason D. Eisenberg  
Michael D. Specht  
Andrea J. Kamage  
Tracy L. Muller  
LuAnne M. DeSantis  
John J. Figueroa  
Ann E. Summerfield  
Tiera S. Coston  
Aric W. Ledford

Michael D. Specht  
Jessica L. Parezo  
Timothy A. Doyle  
Cynthia M. Bouchez  
Nicole D. Dretar  
Ted J. Ebersole  
**Registered Patent Agents**  
Karen R. Markowicz  
Nancy J. Leith  
Helene C. Carlson  
Gabby L. Longworth  
Matthew J. Dowd  
Aaron L. Schwartz  
Mary B. Tung  
Katrina Y. Pei Quach  
Bryan L. Skelton  
Robert A. Schwartzman

Teresa A. Colella  
Jeffrey S. Lundgren  
Victoria S. Rutherford  
Eric D. Hayes  
Michelle K. Holoubek  
Robert H. DeSelms  
Simon J. Elliott  
Julie A. Heider  
Mita Mukerjee  
Scott M. Woodhouse  
**Of Counsel**  
Kenneth C. Bass III  
Evan R. Smith  
Marvin C. Guthrie  
\*Admitted only in Maryland  
\*Admitted only in Virginia  
•Practice Limited to  
Federal Agencies

March 3, 2004

**WRITER'S DIRECT NUMBER:**

(202) 772-8589

**INTERNET ADDRESS:**

LARRYB@SKGF.COM

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Mail Stop Patent Application**

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)  
(Continuation of Appl. No. 09/984,664; Filed: October 30, 2001)  
Appl. No. *To be assigned*; Filed: March 3, 2004  
For: **Abortive Promoter Cassettes (as amended)**  
Inventor: Michelle H. Hanna  
Our Ref: 2072.0010008/LBB/SJE

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. Form PTO-2038 Credit Card Payment Form for \$511.00 to cover:  
\$385.00 Filing Fee for Patent Application (37 C.F.R. § 1.116);  
\$126.00 Extra Claim Fee (37 C.F.R. § 1.116);
2. Fee Transmittal Form (PTO/SB/17);
3. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
4. Authorization to Treat a Reply As Incorporating An Extension of Time  
Under 37 C.F.R. § 1.136(a)(3);
5. U.S. Utility Patent Application entitled:

**Molecular Detection Systems Utilizing Reiterative Oligonucleotide Synthesis**

and naming as inventor:

Michelle H. Hanna

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. A specification containing:
  - i. 101 pages of description prior to the claims;
  - ii. 27 pages of claims (135 claims);
  - iii. a one (1) page abstract;
- c. 33 sheets of drawings: (Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29A, 29B, 29C, 30 and 31);
- d. 16 pages of a Sequence Listing;
- e. A copy of the executed Declaration, as originally filed in U.S. Appl. No. 09/984,664;
6. Request to Approve Proposed Drawing Correction;
7. Photocopy of the six (6) sheets of drawings (Figures 3, 13, 14, 15, 30, and 31) with the corrections noted in red;
8. Clean copies of seven (7) sheets of replacement drawings (Figures 3, 13, 14, 15, 29A, 29B, and 30);
9. Request to Open New Disk File;
10. Preliminary Amendment;
11. Information Disclosure Statement;
12. Form PTO-1449 (20 sheets citing 90 documents); and
13. Two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

Commissioner for Patents  
March 3, 2004  
Page 3

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in cursive script, reading "Lawrence B. Bugaisky".

Lawrence B. Bugaisky  
Attorney for Applicant  
Registration No. 35,086

LBB/SJE/lam  
Enclosures

227347.1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Michelle H. Hanna

Appl. No.: *To be assigned*

Filed: March 3, 2004

For: **Abortive Promoter Cassettes (as amended)**

Confirmation No.: *To be assigned*

Art Unit: *To be assigned*

Examiner: *To be assigned*

Atty. Docket: 2072.0010008/LBB/SJE

**Authorization to Treat a Reply as Incorporating an  
Extension of Time Under 37 C.F.R. § 1.136(a)(3)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Lawrence B. Bugaisky  
Attorney for Applicant  
Registration No. 35,086

Date: March 3, 2004

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Michelle H. Hanna

Appl. No.: *To be assigned*

Filed: March 3, 2004

For: **Abortive Promoter Cassettes (as amended)**

Confirmation No.: *To be assigned*

Art Unit: *To be assigned*

Examiner: *To be assigned*

Atty. Docket: 2072.0010008/LBB/SJE

**Request to Approve Proposed Drawing Corrections**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached are copies of six sheets of drawings, containing proposed corrections to Figures 3, 13, 14, 15, 30 and 31, shown in red. The proposed changes add no new matter to this application. Applicant requests that the Examiner approve the proposed corrections. After official communication of such approval, Applicant will make the appropriate corrections to the formal drawings.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Lawrence B. Bugaisky  
Attorney for Applicant  
Registration No. 35,086

Date: March 3, 2004

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600